

REMARKS

Upon entry of the present Amendment, claims 1-16 are all the claims pending in the application. Claims 1-3, 5-9, 11 and 14 are rejected, while the Examiner indicates that claims 4 and 12-13 are allowed. Further, claim 10 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form to include all the limitations of the base claim and any intervening claims.

By this Amendment, new claims 15 and 16 are added. Claim 4 is amended to clarify antecedent support for the second insulative sheet. Applicant submits that claim 4 remains allowable at least for reasons previously stated. No new matter is presented.

Claim Rejections - 35 U.S.C. § 103

Claims 1-3, 5-9, 11 and 14 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Nakayama et al. (U.S. Patent No. 4,818,236, hereinafter “Nakayama”) in view of Fraioli (U.S. Patent No. 3,903,574). Applicant respectfully traverses and submits that the Examiner has impermissibly relied on hindsight reconstruction in combining the teachings of Nakayama and Fraioli and has therefore failed to establish *prima facie* obviousness of these claims, as evidenced by the following.

With respect to claim 1, the Examiner alleges that Nakayama teaches a circuitry assembly comprising a plurality of first electric wires (referencing harness conductors 6₁ - 6₄) forming a first wire group; a plurality of second electric wires (referencing harness conductors 9₁ - 9₄) intersecting the first electric wires while forming a second wire group; a first insulative sheet

(referencing insulating sheet 8) disposed between the first wire group and the second wire group. *See* Office Action at page 3. However, the Examiner concedes that Nakayama fails to disclose the wiring member that holds both of the first electric wires and the second electric wires and the feature of the wiring member holding the first wire group in a first direction and the second wire group that intersects the first direction, as claimed.

In addressing this deficiency, the Examiner turns to Fraioli, which the Examiner asserts as teaching a wiring member as claimed. In particular, the Examiner points to Figures 1-6 and columns 2-3 of Fraioli and alleges that it would have been obvious to combine the teaching of Fraioli with Nakayama “in order to provide a simple, inexpensive, and effective wiring member (clamp) for joining intersecting first and second cables (see column 1, lines 50-65).” *See* Office Action at pages 3-4.

Applicant respectfully disagrees. For instance, Nakayama teaches a wire harness in which flat conductors of a first branch harness are electrically connected to flat conductors of a second wire harness. More specifically, with reference to Figure 2 of Nakayama below, a vertical branch harness W_1 - W_4 is fixed to each harness conductor of a horizontal branch harness W_0 , respectively, by soldering, rivets, or grommets, through holes 7 formed in an insulating sheet 8 which is disposed between the vertical branch harness and the horizontal branch harness. *See* Nakayama at col. 3, lines 18-28 and Figure 2. Thus, according to Nakayama, the conductors of a first and second group that intersect are electrically connected at respective holes of the insulating sheet.

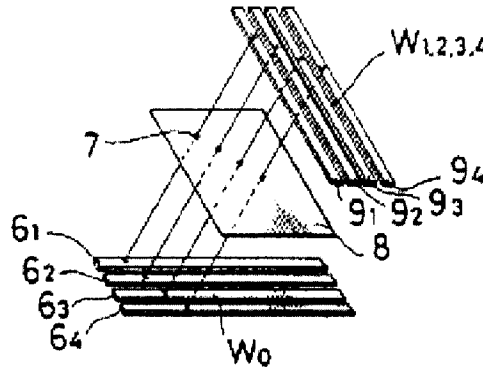


Figure 2 of Nakayama

On the other hand, Fraioli teaches a one-piece cable clamp for joining cables that intersect at an angle, in which the clamp is made of a malleable metal and is tightened by squeezing the parts together to deform the clamps. *See* Fraioli at col. 52-60. With reference to Figure 6 of Fraioli, reproduced below, clamp 10 of Fraioli is taught as including an upper semicircular tubular portion 11 and a lower semicircular tubular portion 12 which respectively receive a pair of cables A and B crossed at a right angle therein. *See* Fraioli at col. 2, lines 25-38. Fraioli further teaches that the cable clamp is “particularly directed” to the clamping of *plastic cables* for reinforced inflatable buildings. *See* Fraioli at col. 2, lines 53-58.

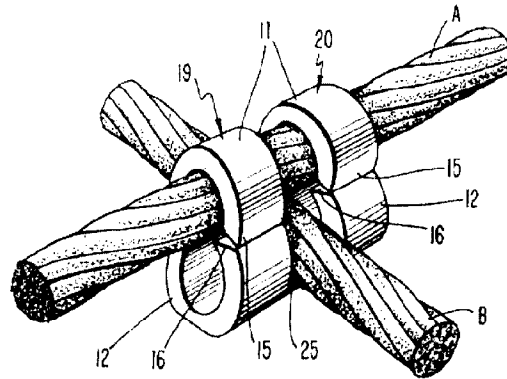


Figure 6 of Fraioli

Applicant submits that the asserted motivation of providing “a simple, inexpensive, and effective wiring member (clamp) for joining intersecting first and second cables” to modify the wire harness of Nakayama to include a one-piece cable clamp, as taught by Fraioli, is improperly based on hindsight reconstruction. As noted above, Nakayama teaches that the conductors of the vertical branch harness are fixed to each of the conductors of horizontal trunk harness and, therefore, held in an intersecting relationship by soldering, welding, rivets, etc. through holes in the insulating sheet 8. *See* Nakayama at col. 3, lines 18-27 and Fig. 2.

Thus, there would be no reason to modify the teaching of Nakayama with Fraioli’s one-piece cable clamp, which is taught as holding a single pair of cables in an intersecting relationship, because each of the conductors of the respective vertical and horizontal harness would ***already be retained*** in an intersecting relationship with each other at the holes of the insulating sheet.

Moreover, the Examiner has failed to provide any explanation as to how Nakayama’s teaching of fixing the conductors at holes in the insulating sheet could be modified so as to again

clamp these intersecting conductors in a second intersecting relationship apart from the previous intersection at the insulating sheet, or how the cable clamp of Fraioli could be modified to function with the insulating sheet of Nakayama, which would necessarily prevent Fraioli's cable clamp from being placed between the intersecting conductors of the vertical and horizontal harnesses.

Also, Fraioli's teaching is directed to a clamp which holds a single cable in an intersecting relationship with one other cable. The Examiner's rejection is devoid of any explanation as to how the single cable clamp of Fraioli could accommodate a plurality of conductors of the horizontal and vertical harnesses, or as to why one of ordinary skill in the art would have been motivated to use a plurality of Fraioli's cable clamps for each of the respective conductors in the wire harnesses.

Accordingly, contrary to the Examiner's assertion, further modifying the wire harness of Nakayama with the cable clamp of Fraioli would not provide "a simple, inexpensive, and effective wiring member for joining intersecting cables", but would be incompatible, redundant, and would needlessly complicate the fixing of the intersecting harnesses of Nakayama. Thus, the Examiner has failed to provide a sufficient motivation to combine these references and the Examiner's asserted motivation to combine is not based on the objective teachings of the references. Rather, the Examiner has relied on impermissible hindsight reconstruction to supply an improper motivation to combine Nakayama and Fraioli.

Therefore, Applicant submits that the Examiner has failed to meet the requisite showing of *prima facie* obviousness, and the rejection of claim 1 is improper. With respect to claims 2-3,

AMENDMENT UNDER 37 C.F.R. § 1.111
Application Serial No. 10/608,196
Attorney Docket No. Q76318

5-11 and 14, Applicant submits that these claims are allowable at least by virtue of depending from claim 1.¹

New Claims

In order to provide additional coverage merited by the scope of the present invention, Applicant is adding new claims 15 and 16. Applicant submits that claims 15 and 16 are allowable at least by virtue of depending from claim 1 and by virtue of the features recited therein.

Conclusion

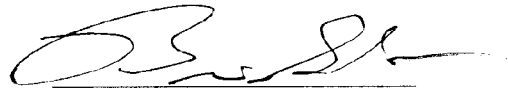
In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

¹ As noted above, independent claim 4 and claims 12 and 13, which depend therefrom, are indicated as being allowed by the Examiner.

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Respectfully submitted,



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